

## Product Texts

Common features of Zytel® nylon resin include mechanical and physical properties such as high mechanical strength, excellent balance of stiffness and toughness, good high temperature performance, good electrical and flammability properties, good abrasion and chemical resistance. In addition, Zytel® nylon resins are available in different modified and reinforced grades to create a wide range of products with tailored properties for specific processes and end-uses. Zytel® nylon resin, including most flame retardant grades, offer the ability to be coloured.

The good melt stability of Zytel® nylon resin normally enables the recycling of properly handled production waste. If recycling is not possible, we recommend, as the preferred option, incineration with energy recovery (-31 kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Zytel® nylon resin typically is used in demanding applications in the automotive, furniture, domestic appliances, sporting goods and construction industry.

## Zytel® 7335F NC010 is a nucleated, lubricated polyamide 6 resin for injection molding.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	970	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.16	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2700	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3600 / 1400	MPa	ISO 527
<sup>[C]</sup> Yield stress	92 / 55	MPa	ISO 527
<sup>[C]</sup> Yield strain	3.8 / 24	%	ISO 527
<sup>[C]</sup> Nominal strain at break	9 / >50	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	70 / 120	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	110 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	3.2 / 18	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	2.5 / 3	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	221 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	60 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	65 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	175 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	200 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	76 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	92 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	4.2 / -	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	300 / -	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	>1E13 / 1E9	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E11	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	30 / -	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	9.5 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	3 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1130 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Film Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Strain at yield, parallel	4 / *	%	ISO 527-3

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Viscosity number	150 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628

[C]: CAMPUS

### Characteristics

#### Processing

Injection Molding

#### Features

Nucleated

#### Delivery form

Pellets, Natural Color

#### Regional Availability

Asia Pacific

#### Additives

Lubricants, Release agent

### Other text information

#### Injection molding

##### POSTPROCESSING

Annealing : 30min at 170°C